



## **SRS Citizens Advisory Board**

### **Salt Processing Focus Group**

#### **Meeting Summary**

May 9, 2000  
Aiken Federal Building  
Aiken, SC

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The Salt Processing Focus Group met on Tuesday, May 9, 2000, at 5:30 p.m. at the Federal Building in Aiken, SC. Attendance was as follows:

#### **CAB Members**

Wade Waters  
Beckie Gaston-Witter  
Karen Patterson

#### **Stakeholders**

Bill McDonell  
Lee Poe  
Mike French  
Ernie Chaput

#### **DOE/Contractors**

Ken Rueter, WSRC  
Kelly Way, WSRC

Lee Poe welcomed everyone and started the meeting. The Focus Group (FG) discussed the following areas:

#### **The National Academy of Science Report**

The FG questioned the status of the NAS draft report that was due originally in March. The review process is set for May, with the report released in June. The Academy has been chartered to review the R&D Plan and provide feedback to the department. Mr. Rueter detailed that the group has been chartered to cross check SRS's job in the waste characterization and composition area. This is the first time the NAS has come up against blending with respect to waste characterization.

Lee Poe asked if the NAS is going to hold a public meeting to issue their report. Mr. Rueter pointed out that Bill Lawless had already sent an email to Kevin Crowley and Robert Andrews requesting an opportunity to review the draft before it was issued. The NAS responded that they are chartered to disclose the information first to the Under Secretary.

#### **Technical Teams and Working Groups**

The organization of the Technical Advisory Team, led by Joel Case, is being finalized. They are focused toward technology deployment. The Department has an obligation to issue a pre-conceptual design. There is a new office of Engineering and Construction Management that has to authorize the start of conceptual design. WSRC is contractually responsible to support this. The Technical Working Group is responsible for the down select. Coming out of this process is the preferred alternative, which feeds into the final SEIS. Then the public meetings and NEPA process takes place, followed by the ROD and the secretary's endorsement.

#### **Technical Uncertainty and Risks**

Mr. Rueter described technical uncertainty and risks, background, higher risk areas, and how uncertainties manifest themselves in schedule and costs in each of the alternatives.

WSRC completed a preliminary risk screening and assessment during the "Investigation" phase of the alternative selection process, referred to as Phase 2 in the five phase approach. There were 425 total risks identified in three categories-- low, moderate and high. High and moderate risks are the bases and drivers for defining the science and technology program. The optimum position is where there are no high or moderate risks and a zero exposure position. The process established by DOE-SR is that a technology decision will not be made with outstanding high risks.

Mr. Rueter pointed out that SRS's risk analysis goes one step further than most risk screenings, not only does SRS maintain a risk inventory, but also that risk is quantified, which SRS refers to as uncertainty. Risk is a matter of managing real life impact in terms of schedule and dollars. At this point in the process, there are no outstanding go/no-go risks.

Mr. Rueter referenced the Risk Management Business Model. This model will help the FG facilitate their questions, understand how the process was followed, and understand the level of detail used in order to reach a decision of each alternative.

### **Risks**

Mr. Rueter detailed the risks for each alternative.

#### ***Caustic Side Solvent Extraction***

Radiolytic Stability

- Modifier in Solvent system exhibited poor radiolytic stability
- Problem lies in modifier

C hemical stability

- Significant modifier degradation at 50 degrees C

R eal Waste Performance

- Limited evaluation in which tests were scoping oriented

F low sheet solvent System proof of concept

- Anionic impurities experienced during initial test
- Low stage efficiencies experienced during tests

#### ***CST Non-Elutable Ion Exchange***

Resin stability

- Leaching
- Column plugging

R esin handling and sampling

- CST plugged DWPF Sampling System
- Size reduced CST could be sampled, but not representatively

#### ***Small Tank TPB Precipitation***

Reactor/Vessel Foaming

- Excessive foaming during real waste tests
- Large scale reactors exhibited foam, but less severely

#### C atalytic Product Decomposition

- No catalyst activation or TPB decomposition witnessed during demo at ORNL
- Bounding decomposition rate yet to be confirmed

Mr. Rueter detailed the uncertainty and baseline schedule for each alternative. The tables include the baseline schedule for the Conceptual Phase, the Preliminary Phase, Final Phase, the Startup Phase, and Radioactive Operations. Each alternative also includes an uncertainty schedule that shows possible schedule delay uncertainties by number of months. The chart shows each of the technologies with the uncertainties factored in the schedules at the receptive points where they would have impact.

Mr. Rueter also outlined the Alternative Life Cycle Cost Baseline and Uncertainty.

M. Poe outlined for the agenda items for the next meeting. Possible topics are Tank Space Update, Alpha Removal, and Down Select Criteria/Weights. The Focus Group does not want to see anymore schedule slippage. SRS is on schedule for the down select and draft Environmental Impact Statement (dEIS) which is due out in December/January timeframe.

The next meeting was set for Tuesday, May 16, 5:00 p.m. at the Aiken Federal Building.

***For copies of meeting handouts call 1-800-249-8155.***